



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/710,665	07/28/2004	Linux Cheng	ACMP0144USA	4664
27765 7590 08/09/2007 NORTH AMERICA INTELLECTUAL PROPERTY CORPORATION P.O. BOX 506 MERRIFIELD, VA 22116			EXAMINER BECK, ALEXANDER S	
			ART UNIT 2629	PAPER NUMBER
			NOTIFICATION DATE 08/09/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

winstonhsu.uspto@gmail.com
Patent.admin.uspto.Rcv@naipo.com
mis.ap.uspto@naipo.com.tw

Office Action Summary	Application No. 10/710,665	Applicant(s) CHENG, LINIX	
	Examiner Alexander S. Beck	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 24, 2007, has been entered. Claims 1-8 are currently pending in U.S. Patent Application No. 10/710,665 and an Office action on the merits follows.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, 4-6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,427,288 to Saito (hereinafter "Saito") in view of U.S. Patent No. 6,115,025 to Buxton et al. (hereinafter "Buxton").

As to claims 1 and 5, Saito discloses an interface apparatus in Figures 1-3 comprising: a base (1); a display panel (20); a shaft (19 and housing of 20) connected to the display panel and movably disposed on the base, wherein the shaft is movable in up, down, left, right, or diagonal

directions, and is rotatable in a plane parallel with a plane of the display panel; wherein when the shaft is moved, the shaft simultaneously moves the display panel. (Saito at col. 4, ll. 14-31; col. 5, ln. 57 – col. 6, ln. 42.)

Saito does not disclose expressly wherein the interface apparatus comprises a receiving circuit, the display panel transforming a received video signal into an image; or a detecting module generating a detecting signal when the shaft is moved, and when the shaft and display panel are rotated in the plane parallel with a plane of the display panel, the images displayed on the display panel move corresponding to the rotation of the interface apparatus.

Buxton discloses a computer system in Figure 1 comprising: a mainframe (10) providing a video signal; and an interface apparatus (12, 14) electrically connected to the mainframe, the interface apparatus comprising: a base (inherently suggested in the desktop monitor for supporting the display panel); a receiving circuit for receiving the video signal (inherently suggested in the display panel for displaying information from the mainframe); a display panel (e.g. screen and driving circuitry of 12) for transforming the video signal into an image and displaying the image; a shaft (18) connected to the display panel and movably disposed on the base, wherein the shaft is rotatable in a plane parallel with a plane of the display panel; and a detecting module (14) for detecting a movement of the shaft relative to the base and outputting a detecting signal; wherein when the shaft is moved, the shaft simultaneously moves the display panel, and the detecting module outputs the detecting signal to the mainframe, and when the shaft and the display panel are rotated in the plane parallel with a plane of the display panel, the images displayed on the display panel move corresponding to the rotation of the interface apparatus. (Buxton at col. 4, ll. 4-65.)

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the teachings of Saito such that the interface apparatus was provided with the mainframe, receiving circuit, display panel and detecting module of Buxton. The suggestion/motivation for doing so would have been to allow a user to change the orientation of a physical display while the on screen user interface maintains its original orientation, sense changes in the orientation of the physical display, and keep the user interface aligned with the user as the display orientation changes to thereby maintain position or direction sensitive components of the interface aligned with the user. (Buxton at col. 1, ll. 7-15.) Moreover, as the orientation of the display changes, the viewpoint of or view port onto the object may also change, which is particularly advantageous in applications that provide virtual representations of models. (Buxton at col. 4, ll. 58-65.)

As to claims 2 and 6, Saito discloses wherein the shaft (19 and housing of 20) further comprises at least one handle (e.g. an end of the housing) connected to the display panel for a user to move the shaft. (Saito at Figures 1-3.) For example, Saito discloses wherein the display panel is to be rotated by applying pressure to the display panel to thereby rotate element 19 by hand and change the display orientation. (Saito at col. 5, ln. 57 – col. 6, ln. 42.) As such, a user grasping an end of the display panel to cause this rotation reads on the limitation of “handle” as presently claimed.

As to claims 4 and 8, Saito as modified by Buxton discloses wherein the display panel is a liquid crystal display. (Buxton at col. 4, ll. 10-11.)

Art Unit: 2629

4. Claims 3 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saito and Buxton as applied to claims 1, 2, 4-6 and 8 above, and further in view of U.S. Patent No. 7,034,814 to Gong et al. (hereinafter "Gong").

As to claims 3 and 7, note the above discussion of Saito and Buxton, in which a user grasping an end of the display panel to cause this rotation reads on the limitation of "handle" as presently claimed. Neither Saito nor Buxton disclose expressly at least one button located on the handle for the user to press; and a button circuit outputting a corresponding button signal while the button is pressed, and the mainframe receiving the button signal and performing a relative operation.

Gong, analogous in art, discloses a mainframe (104) and a monitor (102), and at least one button located on a handle (e.g. an end of the monitor) for a user to press; and a button circuit outputting a corresponding button signal while the button is pressed, and the mainframe receiving the button signal and performing a relative operation. (Gong at col. 4, ln. 66 – col. 5, ln. 45.)

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to further modify the teachings of Saito and Buxton such that the end of the display panel (e.g. "handle" as presently claimed) comprised a button located on the handle for a user to press and a button circuit, as taught/suggested by Gong. The suggestion/motivation for doing so would have been to advantageously allow a user to control operation of a mainframe by interacting with only the display itself, thereby providing a greater degree of flexibility in operating the mainframe. (Gong at col. 4, ln. 66 – col. 5, ln. 45.)

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent No. 5,436,638 to Bolas et al. discloses an image display method and apparatus with means for yoking viewpoint orienting muscles of a user.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander S. Beck whose telephone number is (571) 272-7765. The examiner can normally be reached on M-F, 8AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (571) 272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Alexander S. Beck
August 3, 2007


SUMATI LEFKOWITZ
SUPERVISORY PATENT EXAMINER